

The processes of reduction of ...

S/180/61/000/006/002/020
E021/E135

Ref.15: G.L. Miller. Tantalum and Niobium, London, 1959,
pp 181-187, 283-291.

Ref.17: High Temperature Technology. N.Y.-London, 1956.
ed. J.E. Campbell.

Ref.24: F. Holtsberg, A. Reisman, M. Bewry, M. Berkonbilt.
The polymorphism of Nb₂O₅. J. Amer. Chem. Soc., 1957,
79, 2039.

Ref.26: R. Orr. High temperature heat contents of tantalum and
niobium oxides. J. Amer. Chem. Soc., 1955, 75, 2808-09.

SUBMITTED: March 21, 1961

Card 4/4

BYKHOVSKIY, Yu.A., red.; VELLER, R.L.[deceased], red.; GREYVER, N.S., red.; KLUSHIN, D.N., red.; OL'KHOV, N.P.[deceased], red.; RUMYANTSEV, M.V., red.; SAZHIN, N.P., red.; STRIGIN, I.A., red.; TROITSKIY, A.V., red.; EL'KIND, L.M., red. izd-va; MISHARINA, K.D., red.; LUTSKAYA, G.A., red.; VAYNSHTEYN, Ye.B., tekhn. red.

[Principles of metallurgy in four volumes]Osnovy metallurgii v chetyrekh tomakh. Red.kollegiya: IU.A.Bykhovskii i dr. Moskva, Metallurgizdat. Vol.2. Heavy metals]Tiazhelye metally. 1962. 792 p. (MIRA 15:8)

(Iron--Metallurgy)
(Nonferrous metals--Metallurgy)

BELIYAYEV, A.I., *otv. red.*; BYKHOVSKIY, Yu.A., *red.*; VELLER, R.L., *red.*
[deceased]; GREYVER, N.S., *red.*; KLUSHIN, D.N., *red.*; OL'KHOV,
N.P., *red.* [deceased]; RUMYANTSEV, M.V., *red.*; SAZHIN, N.P.,
red.; STRIGIN, I.A., *red.*; TROITSKIY, A.V., *red.*; KAMAYEVA, O.M.,
red. izd-va; LUTSKAYA, G.A., *red. izd-va*; VAYNSHTEYN, Ye.B.,
tekhn. red.

[Principles of metallurgy in 4 volumes] Osnovy metallurgii v 4
tomakh. Red.kollegiia: IU.A.Bykhovskii i dr. Moskva, Metal-
lurgizdat. Vol.3.[Light metals] Legkie metally. *Otv.red.A.I.*
Beliaev i N.S.Greiver. 1963. 519 p. (MIRA 16:2)
(Light metals)

SHCHERBAKOV, D.I., akademik; FRUMKIN, A.N., akademik; KHACHATUROV, T.S.;
VINOGRADOV, A.P., akademik; SOBOLEV, S.L., akademik; KOSTENKO, M.P.,
akademik; TOLSTOV, S.P.; SAZHIN, N.P.; KAZARNOVSKIY, I.A.; VUL, B.M.;
TROFIMUK, A.A., akademik

Discussion of the annual report. Vest. AN SSSR 33 no.3:25-34
Mr '63. (MIRA 16:3)

1. Chleny-korrespondenty AN SSSR (for Khachaturov, Tolstov, Sazhin,
Kazarnovskiy, Vul).

(Academy of Sciences of the U.S.S.R.)

BUCHHEIM, B.V.; BACHEN, N.S.

Reaction of K_2 with KF_7 in an aqueous solution. Trudy MKHII
no.43:55-57 163. (MIRA 17:10)

10-4 10P(C) 00/00/00/00

ACCESSION NR: AT5012664

UR/2539/63/000/044/0035/0036

4/5

4/3

B+1

AUTHOR: Shchepochkin, B. V., Sazhin, N. P., Yagodin, G. A.

TITLE: Behavior of potassium fluorohafnate during heating

SOURCE: Moscow. Khimiko-tekhnologicheskii institut. Trudy, no. 44, 1963. Issledovan-
iya v oblasti fizicheskoy khimii, analiticheskoy khimii i elektrokhimii (Research in the
field of physical chemistry, analytical chemistry and electrochemistry), 35-36

ABSTRACT: The authors briefly review the studies on potassium fluorohafnates and their analogs, the potassium fluorozirconates, reported in the literature. The thermal behavior of the potassium fluorozirconates is a complex physicochemical process which involves changes in their crystal structure, peritectic processes, and changes in their state of aggregation. Certain differences in the determination of the melting points may be due to a variable composition of the phases obtained and to different heating rates due to the conversion of a part of the product to the gaseous phase. In this paper, data on fluorozirconates are compared with data on the corresponding fluorohafnates, which were studied by the differential-thermal method with a PK-55 Kurnakov pyrometer. Endothermic effects

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ACCESSION NR: AT5012664

2

were noted in the case of $\text{KHfF}_5 \cdot 0.75\text{H}_2\text{O}$ at 96, 340, 414, and 475C; the first effect corresponds to the loss of water, and the last to the fusion of the salt. It is concluded that water is bound mechanically in the KHfF_5 molecule. In the case of K_2HfF_6 , five endothermic effects were observed at 235, 328, 424, 500, and 586C, the latter being the melting point. In the case of $\text{K}_3\text{HfF}_7 \cdot \text{H}_2\text{O}$, endothermic effects were observed at 116, 230, 430, and 900C; the first corresponds to the loss of water, and the last to the fusion of the salt. Orig. art. has: 1 formula.

ASSOCIATION: Moskovskiy khimiko-tekhnologicheskii institut (Moscow Chemical Engineering Institute)

SUBMITTED: 00

ENCL: 00

SUB CODE: IC

NO REF SOV: 013

OTHER: 003

Card 2/2 *mb*

SHCHEPOCHKIN, B.V.; SAZHIN, N.P.

Reaction of sodium fluoride with hafnium fluoride. *Zhur.neorg.khim.*
8 no.5:1281-1284 My '63. (MIRA 16:5)
(Sodium fluoride) (Hafnium fluoride)

TUMANOV, A.T., glav. red.; VYATKIN, A.Ye., red.; GARBAR, M.I., red.; ZAYMOVSKIY, A.S., red.; KARGIN, V.A., red.; KISHKIN, S.T., red.; KISHKINA-RATNER, S.I., doktor tekhn. nauk, red.; PANSIN, B.I., kand. tekhn. nauk, red.; ROGOVIN, Z.A., red.; SAZHIN, N.P., red.; SKLYAROV, N.M., doktor tekhn. nauk, red.; FRIDLYANDER, I.N., doktor tekhn. nauk, red.; SHUBNIKOV, A.V., red.; SHCHERBINA, V.V., doktor geol.-miner. nauk, red.; SHRAYBER, D.S., kand. tekhn. nauk, red.; GENEL', S.V., kand. tekhn. nauk, red.; VINOGRADOV, G.V., doktor khoz. nauk, red.; NOVIKOV, A.S., doktor khoz. nauk, red.; KITAYGORODSKIY, I.I., doktor tekhn. nauk, red.; ZHEREBKOV, S.K., kand. tekhn. nauk, red.; BOGATYREV, P.M., kand. tekhn. nauk, red.; SANDOMIRSKIY, D.M., D.M., kand. tekhn. nauk, red.; BUROV, S.V., kand. tekhn. nauk, red.; POTAK, Ya.M., doktor tekhn. nauk, red.; KUKIN, G.N., doktor tekhn. nauk, red.; KOVALEV, A.I., kand. tekhn. nauk, red.; YAMANOV, S.A., kand. tekhn. nauk, red.; SHEFTEL', I.A., kand. khoz. nauk, st. nauchn. red.; BABERTSYAN, A.S., inzh., nauchn. red.; BRAZHNIKOVA, Z.I., nauchn. red.; KALININA, Ye.M., mlad. red.; SOKOLOVA, V.G., red.-bibliograf; ZENTSEL'SKAYA, Ch.A., tekhn. red.

[Building materials; an encyclopedia of modern technology] Konstruktsionnye materialy; entsiklopediia sovremennoi tekhniki. Glav. red. A.T.Tumanov. Moskva, Sovetskaia entsiklopediia. Vol.1. Abliatsiia - korroziia. 1963. 416 p. (MIRA 17:3)

1. Chlen-korrespondent AN SSSR (for Kishkin).

SHCHEPOCHKIN, B.V.; SAZHIN, N.P.; YAGODIN, G.A.

Behavior of potassium fluorohafnates on heating. Trudy MKHTI no.44:35-36
'64. (MIRA 18:1)

SAZHIN, N.P.

Ultracure metallurgy of nonferrous metals and technical progress
in industry. TSvet. met. 38 no.2:1-4 F '65.

(MIRA 18:3)

SAZHIN, N.P.

"Chemistry of fluoride compounds of actinides" by I.V.
Tananaev and others. Zhur. neorg. khim. 10 no.1:308-
309 Ja '65. (MIRA 18:11)

L 40284-65 EWT(1)/I/ERA(h) Pz-6/Pe'b IJP(c) AT
ACCESSION NR: AP5004604 S/0020/65/160/002/0420/0423

AUTHOR: Sazhin, N. P. (Academician); Maslov, V. N.

TITLE: Preparation of epitaxial films of semiconducting materials by means of "sandwich" method

SOURCE: AN SSSR. Doklady, v. 160, no. 2, 1965, 420-423

TOPIC TAGS: epitaxial film, semiconductor film sandwich method, germanium film
gallium arsenide film, gallium phosphide film

ABSTRACT: The authors checked the effectiveness and universality of the sandwich method for growing epitaxial films of various semiconducting materials. Experiments involving the preparation of epitaxial films of germanium on germanium, gallium arsenide on germanium, and gallium phosphide on gallium arsenide were carried out in the same apparatus. The method was found to be simple and applicable to diverse semiconducting materials, and to give reproducible results. The transport coefficient, transport rate, and resolution of the method were determined and are discussed. The method is applicable to microelectronics for it permits an accurate formation of epitaxial structures with linear dimensions on the order of 10 μ and above. Orig. art. has: 3 figures.

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L 40284-65

ACCESSION NR: AP5004604

ASSOCIATION: Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut red-
kometallicheskey promyshlennosti (State scientific research and planning institute
of the rare metals industry)

SUBMITTED: 04Aug64

ENCL: 00

SUB CODE: SS

NO REF SOV: 000

OTHER: 011

Card

2/2

SAZHIN, N.P.; SHCHEPOCHKIN, B.V.; YAGODIN, G.A.

Reaction of hafnium tetrafluoride with ammonium fluoride in an aqueous solution. Izv. AN SSSR. Ser. khim. no.7:1127-1130 '65. (MIRA 18:7)

1. Khimiko-tekhnologicheskiy institut im. D.I.Mendeleyeva.

SAZHIN, N.P.

High-purity substances in science and technology. Khim prom.
41 no. 12:896-897 D '65 (MIRA 19:1)

L 21680-66 EWP(e)/EWT(m)/EWP(t) LJP(c) JD/JW/JG/WH/JH

ACC NR: AN6006767

(N)

SOURCE CODE: UR/9008/66/000/048/0003/0003

AUTHOR: Sazhin, N. P. (Academician)

ORG: none

TITLE: For the age of rockets and the atom. [Development of new metals in the Soviet Union]

SOURCE: Krasnaya zvezda, no. 48, 1966, 3, col. 1-3

TOPIC TAGS: rare earth metal, metallurgic industry, ultra high purity metal

ABSTRACT: Recent Soviet developments in the field of rare metals and pure and ultra-pure substances are discussed. Titanium and its alloys (in addition to their use in supersonic aviation) are being used in the chemical industry because of high resistance to nitric acid, chlorine, and other corrosives. Four refractory metals are increasingly important: molybdenum, tungsten, tantalum, and niobium. Niobium and its alloys were the subject of over 60% of all papers read at a recent metallurgical convention. It is the basic ingredient in superconductive alloys used in compact devices which generate powerful magnetic fields. New mineral deposits of

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L 21680-66

ACC NR: AN6006767

9
rare earth elements have been discovered, and in recent years all fourteen of them have been produced in the Soviet Union. Among them there are ferromagnetic and anti-ferromagnetic substances, and low temperature superconductors. Gadolinium, europium, and samarium are used in atomic reactors for their hot neutron absorptive capacity. The glass industry uses acids of rare earth elements to polish glass and in the production of special colored and colorless lens. Among recent developments in the technology of pure and ultrapure substances is the construction of furnaces for the production of silicon and germanium single crystals. Copper and nickel impurities are less than 1 mg/ton, thanks to new processes of ion exchange, extraction, and electron ray melting in deep vacuum. New methods have also been discovered for the precise measurement of microimpurities. Potassium fluoride, calcium tungstate and a number of other compounds are new materials used in monocrystalline form in lasers. Lithium fluoride and bromides and iodides of gallium are being used in infrared devices. With the opening of the Ust' Kamenogorsk titanium and magnesium plant in 1965, the Soviet Union is said to be near first place in the production of titanium while Soviet antimony is said to be the best on the world market.

SUB CODE: 11/ SUBM DATE: 00/ ORIG REF: 000/ OTH REF: 000

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L 45958-66 EWT(m)/T/EWP(t)/ETI IJP(c) JD

ACC NR: AP0015477

SOURCE CODE: UR/0181/66/008/005/1539/1544

AUTHOR: Sazhin, N. P.; Mil'vidskiy, M. G.; Osvenskiy, V. B.; Stolyarov, O. G.

ORG: State Scientific-Research and Design Institute of the Rare Metals Industry, Moscow
(Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut redkometallichesko
y promyshlennosti)

TITLE: The influence of alloying on the plastic deformation of gallium arsenide single crystals

SOURCE: Fizika tverdogo tela, v. 8, no. 5, 1966, 1539-1544

TOPIC TAGS: acceptor, plastic deformation, alloying, gallium arsenide crystal, electron
donor, single crystal structure, crystal dislocation

ABSTRACT: The authors investigate the influence of alloying by donor and acceptor admixtures on the behavior of GaAs during plastic deformation. The single crystals were obtained by the method of oriented crystallization and had the properties indicated in Table 1. An analysis of the results obtained shows that it is necessary to take into consideration several factors. These include the elastic and the electrical interaction of the dislocations with the admixtures, the possible structure of dislocations which determine their mobility, the interaction of the dislocations with the vacancies, and the influence of the admixtures on the equilibrium concentration

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L 45958-66

ACC NR: AP6015477

Table 1
Properties of GaAs Crystals

Type of Conductivity	Alloying Admixture	Concentration of Current Carriers, cm^{-3}
n	—	$6.0 \cdot 10^{16}$
n	Te	$1.7 \cdot 10^{17}$
n	Te	$7.0 \cdot 10^{17}$
n	Te	$1.6 \cdot 10^{18}$
n	Te	$8.8 \cdot 10^{18}$
p	Zn	$1.0 \cdot 10^{18}$
p	Zn	$1.2 \cdot 10^{18}$

of charged vacancies. The last two factors, apparently, play the determining role in the determination of the influence of the donor and the acceptor admixtures on the mechanical properties of elementary semiconductors. However, in the case of semiconductive compounds the influence of the concentration of vacancies on the motion of dislocations is not determining, whereas the mobility of dislocations is primarily determined by their structure and interaction with the admixtures. The authors express their gratitude to V. I. Nikitenko for discussing the results and for his comments. Orig. art. has: 3 figures, 2 formulas, and 2 tables.

SUB CODE: 20/ SUBM DATE: 05Jul65/ ORIG REF: 007/ OTH REF: 013

Card 2/2 blg

SAZHIN, S.N.

Novoe v tekhnologii potochnoy proizvod-
stva na lesozagotovkakh, iz opyta raboty Monzensko-
go lesopromkhozha (What's new in the technology of
coordinated production in lumbering operations;
from the work experience of the Monzenskiy lumber
camps). Vologodskoe obl. izd, 1952. 72 p.

SO: Monthly List of Russian Accessions, Vol. 6, No. 1, April 1953

SAZHIN, S. N.

6716. Sazhin, S. N. Novoye v tekhnologii potochного proizvodstva na lesozagotovkakh. (Iz opyta raboty Monzenskogo lespromkhoza). Vologda Obl. kn. red., 1954. 20 sm.
Ch. 2. 136 s. s ill.; 4 l. chert. 4.000 ekz. 3 r. 65 k. -- (55-2342)p
634.98:658.561(47.22)

SO: Knizhnaya Letopis' No. 6, 1955

SAZHIN, Stepan Nikitich; KERSAYA, Ye.V., redaktor; GORYUNOVA, L.K.,
redaktor izdatel'stva; SHITS, V.P., tekhnicheskiy redaktor

[Organization of preparatory work in the cutting area] Organizatsiia
podgotovitel'nykh rabot na lesosеke. Moskva, Goslesbumizdat, 1956.
63 p. (MLBA 9:7)

(Lumbering)

SAZHIN, V.

Automation has made its way in the fields. IUn. nat. no.9:20-21
S '59. (MIRA 13:1)

(Automation)

SAZHIN, V.A.

Manufacture of stopper tubes by the stiff mud process at the
"Krasnaya Zvezda" Plant. Ogneupory 28 no.6:251-253 '63.
(MIRA 16:6)

1. Shamotnyy zavod "Krasnaya Zvezda".
(Refractory materials)

TERESHKOV, P.I.; SAZHIN, V.A.

Growth in the production and improvement in the quality of
refractory materials in the Ukrainian S.S.R. Met. i gornorud.
prom. no.4:55-57 J1-Ag '64. (MIRA 18:7)

1. Ukrainskiy sovet narodnogo khozyaystva.

ZHUKOV, A.V.; SASHIN, V.A.

Specialization in the production of refractories. Ogneupory 50
42-46 '65. (MIRA 18:2)

1. Vostochnyy institut ogneuporov (for Zhukov). 2. Ukrainskiy
soviet narodnogo khozyaystva (for Sashin).

TERESHKOV, P.I.: SAZHIN, V.A.

At the exhibition of progressive practices in the national
economy of the Ukrainian S.S.R. Ogneupory 29 no.10:478-479
1964. (MIRA 18:7)

1. Ukrainskiy sovet narodnogo khozyaystva.

SAZHIN, V.S.

PONOMAREV, V.D., prof., doktor tekhn.nauk; SAZHIN, V.S. kand.tekhn.nauk.

Crystallizing sodium aluminate from aluminate solutions. Sbor.
nauch.trud. KazGMI no.14:371-385 '56. (MIRA 10:10)
(Crystallization) (Sodium aluminates)

Sazhin, V.S.

15 27
2) Convention of nepheline concentrate into alumina and
alkali. V. D. Potomarenko and V. S. Sazhin. U.S.S.R.
1957. Nepheline concentrate is auto-

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Sazhin, V.S.

136-12-10/18

AUTHOR: Ponomarev, V.D., Professor, and Sazhin, V.S., Candidate of Technical Sciences.

TITLE: Hydrochemical Alkali Method for Treating Nepheline Rocks (Gidrokhimicheskiy shchelochnoy sposob pererabotki nefelinovykh porod)

PERIODICAL: Tsvetnyye Metally, 1957, No.12, pp. 45-51 (USSR)

ABSTRACT: Pointing out that the Soviet Union possesses practically unlimited resources of nepheline rocks, the authors divide the methods proposed for their treatment into six groups. The main interest of research workers, however, has centred on the method of sintering with lime, as introduced by I.L. Talmud at the Volkhov Aluminum Plant (Volkhovskiy alyuminiyevyy zavod). The authors have shown that under the right conditions, nephelines can be decomposed by alkali solutions, without preliminary sintering, to give alumina in solution. Work at the Ac.Sc. of the Kazakh SSR and the Kazakh Mining and Metallurgical Institute (Kazakhskiy gorno-metallurgicheskiy institut) has shown the wide scope of this method. The authors give a schematic outline of the method (Fig.1) which consists essentially of the following: After treatment of the nepheline concentrate or rock with lime and alkali in an autoclave, the residue is freed from aluminate and then returned to the autoclave with water. The second

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136-12-10/18

Hydrochemical Alkali Method for Treating Nepheline Rocks

residue can be used for cement manufacture. The aluminate solution is evaporated and $\text{Na}_2\text{O} \cdot \text{Al}_2\text{O}_3 \cdot 2.5\text{H}_2\text{O}$ crystallises out, the alkali mother liquor being available for leaching. The sodium aluminate is dissolved in water, aluminium hydroxide being removed and calcined to alumina. The authors go on to consider in detail the individual stages of the process, which is still under development. Advantages claimed include 90-92 and 85-90% recoveries of alumina and alkalis, respectively, with the alkali in the more valuable caustic form; a lime consumption half the normal, and the possibility of treating unconcentrated ores. The present disadvantages are the use of a large excess of alkali; a high steam consumption; the need to burn all the limestone. There are 2 figures and 9 references, 8 Russian and 1 English.

AVAILABLE: Library of Congress

Card 2/2

PONOMAREV, V.D.; SAZHIN, V.S.

Leaching alumina from nephelines using alkaline solutions in the presence of lime. Izv. vys. ucheb. zav.; tsvet. met. no.2:93-100 '58. (MIRA 11:8)

1. Kazakhskiy gornometallurgicheskiy institut.
(Alumina) (Nephelines) (Leaching)

PONOMAREV, V.D.; SAZHIN, V.S.

Decomposition of nephelines by alkaline solutions. Zhur. prikl.
khim. 31 no.8:1143-1149 Ag '58. (MIRA 11:10)

1. Kazakhskiy gorno-metallurgicheskiy institut.
(Nepheline) (Alkalies)

PONOMAREV, V.D.; SAZHIN, V.S.

Treatment of blast furnace slags for the recovery of alumina.
Nauch.dokl.vys.shkoly; met. no.2:65-68 '59. (MIRA 12:5)

1. Kazakhskiy gorno-metallurgicheskiy institut.
(Slag) (Alumina)

69829

S/136/60/000/05/009/025
E071/E235

18.3100

AUTHORS: Ponomarev, V. D., Ni, L. P., and Sazhin, V. S

TITLE: A Combined Method for the Complete Processing of High Silica and High Iron Bauxites Containing Titanium

PERIODICAL: Tsvetnyye metally, 1960, Nr 5, pp 44-48 (USSR)

ABSTRACT: A technological scheme for processing bauxites including a branch for processing red mud with a complete utilisation of its components is proposed. In this scheme the extraction of iron from the red mud is done by reducing smelting in an electric furnace and the extraction of alumina and alkali from slags by hydrochemical leaching. The remaining residues enriched in titanium dioxide can be further utilised for the production of titanium. The scheme is shown in the figure. The main operations of the proposed scheme were verified on a laboratory scale, using hydroargillitic bauxites of the following composition, %: SiO_2 - 10.65, Al_2O_3 - 43.0, Fe_2O_3 - 17.35, TiO_2 - 2.45, CaO - 1.34, S - 0.4. The following main results were obtained. Optimum leaching conditions of bauxites: sodium oxide concentration in the return aluminate solution 200 to 240 g/litre; duration of

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S/136/60/000/05/009/025
E071/E235

A Combined Method for the Complete Processing of High Silica and High Iron Bauxites Containing Titanium

leaching 2 hours at 105°C. A stable extraction of alumina equal to 76.5% (97% of the theoretically possible) is obtained. Despite a low ratio of liquid to solid (3:1 initially and 6:1 after leaching) the pulp possessed a good fluidity and did not present any difficulty. The settling of red mud was done with the addition of 0.2% starch. The necessary settling area of the diluted pulp 2.42 m²/t day, for various washing stages 5.0 to 6.5 m² t/day. This indicated that the treatment of bauxite with high modulus return solutions does not present any difficulties during leaching, settling and washing of red mud. Smelting of the red mud (16.7% SiO₂, 34.8% Fe₂O₃, 19.15% Al₂O₃, 6.35% TiO₂, 9.1% Na₂O) was done on a 1000 g sample with 30 g of charcoal at 1550°C with a retention time of 20 minutes. The extraction of iron into pig iron - 96.8%, silicon in pig 0.05 to 0.15%, the pig was alloyed with vanadium, chromium and gallium. The composition of slag: 30.25% SiO₂, 38.4% Al₂O₃, 12.48% TiO₂, 1.5% Fe and 15% Na₂O (equivalent to a transfer from the red mud of all

Card 2/3 the alumina, 99.2% of titanium dioxide and 83.1 of alkali).

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S/136/60/000/05/009/025
EO71/E235

A Combined Method for the Complete Processing of High Silica and High Iron Bauxites Containing Titanium

Optimum conditions of preferential leaching of alumina from slag: in autoclave (reaction 1): concentration of sodium oxide in the initial solution 350 to 500 g/litres, the initial caustic modulus of the pulp 13 to 14; addition of calcium oxide as calculated from the molar ratio of $\text{CaO}:\text{SiO}_2 = 1:1$, pressure - 50 atm, duration of leaching 15 minutes. Under these conditions, the extraction of alumina from slag amounts to 90%. The chemical composition of the autoclave mud after autoclaving: 27.1% SiO_2 , 3.14% Al_2O_3 , 1.9% Fe, 12.5% TiO_2 , 29.36% CaO , 13.7% Na_2O . The extraction of sodium oxide (reaction 2) is done with an alkali solution containing 60 g/litres of Na_2O , during 12 hours at a ratio of liquid to solid of 6:1 and temperature 95 to 100°C. About 90 to 95% of Na_2O can be removed from the mud. The residue containing 14% of titanium dioxide can be used for its recovery. There are 1 figure and 7 references, 6 of which are Soviet and 1 English. 4

Card 3/3

PONOMAREV, V.D., otv.red.; NI, L.P., red.; RUBAN, N.N., red.;
SAZHIN, V.S., red.; SOLENKO, T.V., red.; ZHUKOVA, N.D., red.;
ROZOKINA, Z.P., tekhn.red.

[Chemistry and technology of alumina; transactions] Khimiya i
tekhnologiya glinozema; trudy. Alma-Ata, Izd-vo Akad.nauk
Kazakhskoi SSR, 1961. 162 p. (MIRA 15:5)

1. Vsesoyuznoye soveshchaniye po khimii i tekhnologii glinozema,
Alma-Ata, 1959. 2. Institut metallurgii i obogashcheniya AN Kazakh-
skoy SSR(for Ni). 3. Kazakhskiy politekhnicheskii institut (for
Ponomarev, Sazhin).

(Alumina)

SHEKA, Ivan Arsen'yevich, doktor khim. nauk; CHAUS, Ivan
Stepanovich, kand. khim. nauk; MITYUREVA, Tamara Trifonovna,
kand. khim. nauk; SAZHIN, V.S., kand. tekhn. nauk,
retsenzent; RAYTEURD, L.L., inzh., red.izd-va; BEREZOVYY,
V.N., tekhn. red.

[Gallium] Gallii. Kiev, Gostekhizdat USSR, 1963. 296 p.
(MIRA 17:1)

SAZHIN, V.S.; SHOR, O.I.; ARAKELYAN, O.I.; VOLKOVSKAYA, A.I.; KOLESNIKOVA, I.A.

Solid phases formed in the system $\text{Na}_2\text{O} - \text{Al}_2\text{O}_3 - \text{SiO}_2 - \text{H}_2\text{O}$.
Ukr. khim. zhur. 29 no.11:1123-1128 '63. (MIRA 16:12)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

SAZHIN, V.S.; SHOR, O.I.; KOLESNIKOVA, I.A.; VOLKOVSKAYA, A.I.

Isotherms of solubility of aluminum oxide in the system
 $\text{Na}_2\text{O} - \text{CaO} - \text{Al}_2\text{O}_3 - \text{SiO}_2 - \text{H}_2\text{O}$. Ukr. khim. zhur. 30
no.18:3-8 '64. (MIRA 17:6)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

ACCESSION NR: AP4037113

S/0258/64/004/002/0364/0368

AUTHOR: Sazhin, V. S. (Moscow)

TITLE: Elastoplastic distribution of stresses about an aperture close to square

SOURCE: Inzhenernyy zhurnal, v. 4, no. 2, 1964, 364-368

TOPIC TAGS: elastoplastic stress, square aperture, rounded corner, plane deformed state, Laurent expansion, plastic equilibrium

ABSTRACT: Using the methods of P. I. Perlin, the author gives an approximate solution of the problem of elastic plastic stress distribution around a square aperture with rounded corners. The boundary conditions are: on the contour of the square $\sigma_n = \tau_{nt} = 0$, at ∞ the compressing stresses $\sigma_x^\infty = \sigma_y^\infty$. The author studies the plane deformed state. Conditions of equality of all the stress components must be satisfied on the line of division of the elastic and plastic regions.

$$4 \operatorname{Re} \Phi [\xi(e_j)] = \sigma_x(e_j) + \sigma_y(e_j). \quad (1)$$

$$2 \operatorname{Re} \left\{ \bar{z}_j \frac{\Phi' [\xi(e_j)]}{\omega' [\xi(e_j)]} + \Psi [\xi(e_j)] \right\} = \sigma_y(e_j) - \sigma_x(e_j). \quad (2)$$

Card 1/2

ACCESSION NR: AP4037113

$$\operatorname{Im} \left\{ \bar{e}_j \frac{\Phi'[\xi(e_j)]}{\omega'[\xi(e_j)]} + \Psi[\xi(e_j)] \right\} = \tau_{xy}(e_j), \quad (3)$$

where $\Phi(\xi)$ and $\Psi(\xi)$ are analytic functions which determine stresses in the elastic region; $\omega(\xi)$ is a function which maps the exterior of the unit circle onto the exterior of the contour up to which the stress functions are analytically extended; $\sigma_x(e_j)$, $\sigma_y(e_j)$ and $\tau_{xy}(e_j)$ are stress components at points of the line of division of the elastic and plastic regions which are obtained from the solution of the problem of plastic equilibrium. The author assumes a Laurent expansion in powers $4n$ and $4n + 2$, $n = 0, 1, 2, \dots$ because of the three axes of symmetry. He tabulates the results. Orig. art. has: 3 tables, 2 figures, and 6 formulas.

ASSOCIATION: none

SUBMITTED: 20Jun63

DATE ACQ: 05Jun64

ENCL: 00

SUB CODE: AP

NO REF SOV: 004

OTHER: 000

Card 2/2

SAZHIN, V.S., inzh.

Analytical determination of bolt lengths in rod bolting. Shakht.
stroi. 8 no.6:15-17 Je '64. (MIRA 17:10)

1. Nauchno-issledovatel'skiy institut osnovaniy i podzemnykh
sooruzheniy.

MOSHKINA, M.K.; SAZHIN, V.S.

Soda-free leaching of nepheline sinters. Ukr. khim. zhur.
30 no.3:296-299 '64. (MIRA 17:10)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

SAZHIN, V.S.; DENISEVICH, V.Ye.; VOLKOVSKAYA, A.I.

Decomposition of albite and microcline in caustic soda solutions.
Ukr. khim. zhur. 31 no.4:379-384 '65.

(MIRA 18:5)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

SAZHIN, V.S.; DENISEVICH, V.Ye.; VOLKOVSKAYA, A.I.

Decomposition of albite and microcline in caustic potash solutions. Ukr. khim. zhur. 31 no.6:564-567 '65. (MIRA 18:7)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

MOSHKINA, M.K.; SAZHIN, V.S.; DEMENT'YEVA, S.D.

Interaction of kaolin with aluminate solutions. Ukr. khim. zhur.
31 no.8:851-856 '65. (MIRA 18:9)

SAZHIN, V.S. (Moskva)

Elastoplastic problem for an infinite plane having a square hole.
Prikl. mekh. 1 no.11:134-137 '65. (MIRA 19:1)

1. Nauchno-issledovatel'skiy institut osnovaniy i podzemnykh
sooruzheniy Akademii stroitel'stva i arkhitektury SSSR.

SAZHIN, V.S.; BUKHOVETS, V.G.; DENISEVICH, V.Ye.; OBOLONCHIK, N.V.

Interaction in the system $\text{Na}_2\text{O} - \text{K}_2\text{O} - \text{Al}_2\text{O}_3 - \text{SiO}_2 - \text{H}_2\text{O}$.
Ukr. khim. zhur. 31 no.9:973-978 '65. (MIRA 18:11)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

MOSKALEV, P.I., dotsent; SAZHIN, V.V.

Principles of the scientific organization of work in classification yards.
Zhel. dor. transp. 47 no.9:26-32 S '65. (MIRA 18:9)

1. Glavnyy inzh. sortirovochnoy stantsii Inskaya (for Sazhin).

SAZHIN Yu. G.

18.3100

77722
SOV/149-60-1-11/27

AUTHORS: Sushkov, K. V., Darda, V. T., Ganchenko, V. M., Neiman, V. G., Putilin, Yu. M., Sazhin, Yu. G., Chirkova, N. P., Yalova, V. G.

TITLE: Experimental Electrosmelting of Lead Concentrates With Soda Under Semi-Industrial Conditions

PERIODICAL: Izvestiya vysshikh uchebnykh zavvedeniy. Tavetnaya metallurgiya, 1960, Nr 1, pp 84-90 (USSR)

ABSTRACT: This article describes the application of an experimental method of lead smelting with soda under semi-industrial conditions developed by K. V. Sushkov, Cand. of Techn. Sciences, (Collection of Scientific Works, KazGMI, Nos 10, 12, 16, 1955). Tests were carried out by the experimental shop and lead plant (svintotsvyy zavod) of Leninogorsk Combine (Leninogorskiy Kombinat) and by Kazakh Mining and Metallurgical Institute (Kazakhskiy gornometallurgicheskiy institut). Smelting was done in a single-phase electrical furnace with a 0.8 m² bottom area, 250 kw transformer

Card 1/9

ASSOCIATION: Kazakh Mining and Metallurgical Institute. Chair of General Metallurgy and Metallurgical Furnaces
Card 8/9

(Kazakhskiy gornometallurgicheskiy institut. Kafedra obshchey metallurgii i metallurgicheskikh pechey)

SUBMITTED: June 8, 1959

GOTKIN, P.S.; BARAKOV, S.M.; SAZHIN, Yu.G., aspirant

Study of gold-arsenious concentrates. Sbor. nauch. trud. Kaz GMI
no.19:86-92 '60. (MIRA 15:3)

(Gold) (Ore dressing)

GOL'DMAN, M.M.; SHUSTER, R.L.; MACHKASOV,, Ye.I.; SAZHIN, Yu .G.;
SULEYMEYNOV, E.N.; SPIVAK, Yu.M.; NI, L.P.; PONOMAREV, V.D.

Utilizing nepheline pulp, lean in calcium oxide for needs of
the construction industry. Trudy Inst. met. i obog. AN Kazakh.
SSR 8:122-125 *63 ; (MIRA 17:8)

USSR / Forestry. Forest Management.

K

Abs Jour: Ref Zhur-Biol., No 7, 1958, 29563.

Author : Sazhina, I. G.

Inst : ~~Siberian~~ Technical Forestry Institute.

Title : Several Regularities in Structure in the Pine
Woods of Karaul Forest.
(Nekotoryye zakonomernosti v stroenii sosnyakov
Karaul'noy lesnoy dachi).

Orig Pub: Tr. Sibirsk. lesotekhn. in-ta, 1956, sb.14, 67-72.

Abstract: No abstract.

Card 1/1

55

SAZ INA, K. A.

Sazhina, K. A.

"Aspects of Blood Supply of the Cervical Portion of the Vagus Nerve in Man and Certain Mammals." Min Health RSFSR. Moscow Medical Stomatological Inst. Moscow, 1955. (Dissertation for the Degree of Candidate in Medical Science)

So: Knizhnaya letopis', No. 27, 2 July 1955

28 (5)
AUTHORS:

Timonova, M. A., Sidel'nikova, L. N.,
Sazhina, L. A.

05728
SOV/32-25-10-17/63

TITLE:

Method of Detecting Flux Inclusions in Semiproducts and
Parts made from Magnesium Alloys

PERIODICAL:

Zavodskaya laboratoriya, 1959, Vol 25, Nr 10, pp 1203 - 1204
(USSR)

ABSTRACT:

By the action of moisture on flux inclusions in magnesium alloys, a considerable corrosion of the latter may be caused. In order to prevent this, the manufactured single parts are subjected to a special control. Together with Engineer T. I. Yershova and B. M. Sheyer, a suitable control method was developed which is principally based on accelerating the corrosion in an atmosphere of high moisture content, loosening the corroded spots (i.e. the flux inclusions) with a water drop, and determining the presence of chlorine ions in this water drop. At a relative moisture of 98%, the test will take 48 hours. In order to reduce the general corrosion of the sample, the metal surface is treated in bichromate-, nitric-acid-, and ammonium-chloride solutions (at 70-80°, for 2-5

Card 1/2

Method of Detecting Flux Inclusions in Semiproducts
and Parts made from Magnesium Alloys

05728

SOV/32-25-10-17/63

minutes) which treatment does not influence the detection
of the flux inclusions. There is 1 Soviet reference.

Card 2/2

SAZHINA, L.I.

Seasonal changes in zooplankton of the northwestern part of the
Black Sea in 1957. Trudy SBS 17:262-275 '64.

(MIRA 18:6)

SAZHINA, L.I.

USSR/Cosmochemistry. Geochemistry. Hydrochemistry.

D

Abs Jour : Referat. Zhurnal Khimiya, No 6, 1957, 1889⁴

Author : A.A. Beus, L.I. Sazhina.

Inst : -

Title : Concerning Berillium Contents in Acid Magmatic Rocks.

Orig Pub. : Dokl. AN SSSR, 1956, 109, No 4, 807-810.

Abstract : Berillium contents were spectroscopically determined in 300 mean samples, individual specimens and rock forming minerals from various granite ranges of USSR (mean samples were prepared each from 15 to 30 separate samples taken within the limits of a range). Samples containing less than $3 \times 10^{-4}\%$ Be were analyzed using the Morin fluorometric method. Following limits were obtained for granite rocks: $2 - 32 \times 10^{-4}$; the mean value 5×10^{-4} exceeds the values obtained by Goldschmidt (3.6×10^{-4}) and Sandell (3×10^{-4}) using a comparatively small number of specimens. Distribution of Be in rock forming minerals (according to 4 or 5 determinations, in %): feldspars $1 - 10 \times 10^{-4}$, quartz $\leq 2 \times 10^{-5}$, micas and hornblende from 1×10^{-4} (biotite) to 5×10^{-3} (muscovite). Increased

Card 1/2

-7-

USSR/Cosmochemistry. Geochemistry. Hydrochemistry.

D

Ab **"APPROVED FOR RELEASE: 03/14/2001** **CIA-RDP86-00513R001447510014-4"**

content of Be was noted in muscovitic granites that had been subject to pneumatolitic processes.

Card 2/2

-8-

Short Communications - On the Distribution of Rubidium in
Granites of the USSR

SOV/7-58-6-11/16

and in muscovite granites 0.031%, in alkali granites 0.031%, in aplitic granites 0.018%, in plagioclase granites 0.009%. The mean rubidium content is 0.0257%. This is in conformity with the results obtained by other research workers (Butler, Smales, Herzog, Pinson and Ahrens). There are 5 figures, 1 table, and 5 references, 4 of which are Soviet.

ASSOCIATION: Institut mineralogii, geokhimii i kristallokhimii redkikh elementov AN SSSR, Moskva (Institute of Mineralogy, Geochemistry and Crystallochemistry of Rare Elements, AS USSR, Moscow)

SUBMITTED: July 3, 1958

Card 2/2

S/081/60/000/010/005/009
A166/A129

AUTHORS: Sitnin, A.A.; Sazhina, L.I.

TITLE: The content of rubidium in beryls

PERIODICAL: Referativnyy zhurnal. Khimiya, 1960, no. 10, 102, abstract 38238.
(Tr. in-ta mineralogii, geokhimii i kristalloghimii redk. elementov
AN SSSR, 1959, no. 2, 84 - 86)

TEXT: The quantitative spectral method was used to study the distribution of Rb in 22 samples of beryl from various granite pegmatites and greisens in the USSR. In addition chemical methods were used to determine Na, K, Cs and Li. It was found that the quantity of Rb in beryls of various genesis varied from 0.0025 to 0.13% (predominantly n. 10⁻³%). The Rb concentration rose from early non-alkali beryls (0.006%) to the later Na-Li- (up to 0.04%) and Li-Cs-varieties (up to 0.13%). Analysis showed that Rb also accumulates in associated K-minerals (muscovite, microcline, siderophyllite) in amounts of up to 0.003 - 0.3%, i.e., 10 - 100 times more than its content in beryls. ✓

G.V.

[Abstracter's note: Complete translation]

Card 1/1

SAZHINA, L.I.

Development of copepods in the Black Sea: pt. 1: Naupliar stages
of *Acartia clausi* G., *Centropages Kroyeri* G., *Oithona minuta*
Kritcz. Trudy SBS 13:49-67 '60. (MIRA 14:3)
(Black Sea--Copepoda) (Larvae--Crustacea)

PETIPA, T.S.; SAZHINA, L.I.; DELALO, Ye.P.

Vertical distribution of zooplankton in the Black Sea as related to the hydrogeological conditions. Dokl.AN SSSR 133 no.4:964-967 Ag '60. (MIRA 13:7)

1. Sevastopol'skaya biologicheskaya stantsiya imeni A.O. Kovalevskogo Akademii nauk SSSR. Predstavleno akademikom Ye.N. Pavlovskim.

(Black Sea--Zooplankton)

SAZHINA, L.I.

Development of copepods in the Black Sea. Report No.2: Naupliar
stages of *Calanus helgolandicus* (Claus), Trudy SES 14:102-108
'61. (MIRA 15:4)

(Black Sea--Copepoda) (Larvae--Crustacea)

PETIPA, T.S.; SAZHINA, L.I.; DELALO, Ye.P.

Vertical distribution of zooplankton in the Black Sea.
Trudy SBS 16:119-137 '63. (MIRA 17:6)

PETIPA, T.S.; SAZHINA, L.I.; DELALO, Ye.P.

Distribution of zooplankton in the Black Sea in 1951-1956. Okeanologiya
3 no.1:110-122 '63. (MIRA 17:2)

1. Sevastopol'skaya biologicheskaya stantsiya AN SSSR.

SAZHINA, Muza Arkad'yevna; DOLGORUKOV, P.D., otv.red.; PAL'CHUN, I.F., red.

[Economic crises of overproduction; lecture] Ekonomicheskie kri-
zisy pereproizvodstva; lektsiia. Otvet.red.P.D.Dolgorukov.
Moskva, Izd-vo Mosk.univ., 1959. 64 p. (MIRA 13:3)
(Overproduction)

COUNTRY : USSR
 SUBJECT : Cultivated Plants. Grains. Leguminous Grains.
 Tropical Cereals.
 JOURN.: Ref Zhur-Biologiya, No. 1, 1959, No. 20212

Author : Sazhina, M.A.
 INST. :
 TITLE : Distinct Winter Wheat Varieties Guarantee
 High Yields.

OTIC. PUB.: S. Zh. Sev. Kavkaza, 1958, No.4, 40-44

ABSTRACT : Varieties of winter wheat allotted to districts
 in Krasnodarskiy Krai are described. Bazostaya
 A variety in a field test produced a higher
 yield than hybrid 481 by 0.5-6.9 cwt/ha, it is
 resistant to drought and to leaf rust, also more
 winter resistant than variety Novoukrainka-84.
 The average yield of variety Skorospelka-3
 for the period 1955-1957 was 43.7 cwt/ha. This
 variety is distinguished by its early maturity
 and resistance to leaf rust. The variety

CARD : 1/2

IGNAT'YEV, B.K., kand.sel'skokhoz.nauk.; SAZHINA, M.A., agronom

Possibilities for increasing winter wheat yields in the Kuban.
Zemledelie 7 no.7:54-58 J1 '59. (MIRA 12:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut maslichnykh i
efiromaslichnykh kul'tur. (for Ignat'yev). 2. Krasnodarskaya krayevaya
inspektura po sortoispytaniyu sel'skokhoz.kul'tur (for Sazhina).
(Kuban--Wheat)

KONYUKHOV, B.V.; STROYEVA, O.G.; SAZHINA, M.V.; LIPGART, T.A.

Injury of the retina as a cause of microphthalmia in mice of a mutant ocular retardation line. Arkh. anat., gist. i embr. 44 no.4:36-43 Ap '63.

(MIRA 17:6)

1. Laboratoriya genetiki (zav. - kand. biol. nauk B.V. Konyukhov) Instituta eksperimental'noy biologii AMN SSSR; laboratoriya eksperimental'noy embriologii imeni D.P. Filatova (zav. - chlen korrespondent AN SSSR B.L. Astaurov) Instituta morfologii zhivotnykh imeni A.N. Severtsova AN SSSR, Moskva. Adres avtorov: Moskva, D-57, Baliyskiy pos., 13, Institut eksperimental'noy biologii AMN SSSR, Laboratoriya genetiki; Moskva, B-71, Leninskiy prosp. 33. Institut morfologii zhivotnykh im. A.N. Severtsova AN SSSR, laboratoriya eksperimental'noy embriologii imeni D.P. Filatova.

VYAZOV, O.Ye.; SAZHINA, M.V.

Immunobiological study of the process of regeneration of
the crystalline lens in the triton (*Triton taeniatus*). Zhur.
ob. biol. 22 no.4:305-310 J1-Ag '61. (MIRA 15:6)

1. Institute of Experimental Biology, U.S.S.R. Academy of
Medical Sciences, Moscow.
(CRYSTALLINE LENS) (REGENERATION (BIOLOGY))

KONYUKHOV, B.V.; SAZHINA, M.V.

Disorders in the development of the eye in a strain of mice with
microphthalmia (mutation blind). Zhur.ob.biol. 23 no.4:256-264
Jl-Ag '62. (MIRA 15:9)

1. Institute of Experimental Biology, Academy of Medical Sciences
of the U.S.S.R., Moscow.
(EYE--DISEASES AND DEFECTS) (EMBRYOLOGY)

SAZHINA, N.B.
SAZHINA, N.B.

Interpretation of the gravitational survey in the Krymskaya and
Abinskaya Districts in Krasnodar Territory. Prikl. geofiz. no.17:
203-210 '57. (MIRA 11:2)

(Krasnodar Territory--Gravity)

SAZHINA, N.B.

1A(5)
 Vsesoyuznyy nauchno-issledovatel'skiy institut geofizicheskikh metodov razvedki
 Razvedchnaya i promyslovaya geofizika, Vyp. 26 (Exploration and Industrial
 Geophysics, Nr 26) Moscow: Gosgeophysizdat, 1951. 87 p. (Series: Obshch
 proizvodstvennaya opytka) 4,000 copies printed.
 M.: M.K. Polakov; Recr. Ed.: Ye.G. Perelman; Tech. Ed.: A.S. Polosina.
 PURPOSE: This booklet is intended for exploration geophysicists and geologists.
 COVERAGE: This collection of articles includes discussions of improvements in
 seismic exploration techniques and interpretations of data obtained by the
 reflected and refracted waves method of seismic exploration. Individual
 articles discuss: the construction of gravimetric maps, improvements in
 industrial logging equipment, the standardization of radioactive electro-
 logging equipment, methods for computing labor productivity in geophysical
 operations. A monogram facilitates the interpretation of data and conditions
 when using gamma logging of boreholes is described. References accompany
 each article.
 Card 1/3

Xu'er, Yu.G., and S.P. Yarsenov, Marine Seismic Exploration
 Drupov, A.K., and Ye.M. Cherenykh, Seismic Soundings in Determining the
 Velocities of Elastic Waves
 Gal-Virskiy, B.B., Method of Plotting Refracting Horizons in the Presence
 of a Mean Velocity Gradient of Arbitrary Direction
 Mathias, R.H., An Example of a Rational Selection of an Isomomally
 Cross-Section for Gravimetric Maps
 Shvart, O.A., Accuracy of an Approximate Evaluation of Elevation
 Differences Based on a Formula of the Gravity Effect of an Infinite
 Bed
 Card 2/3

Zaporozhets, V.M., and V.V. Buligin, Differential Spectra of γ Radiation
 from Cylindrical Radiators
 Salin, V.V., Standardization of Equipment for Radioactive Logging
 Zal'tman, P.A., Newly Designed Parts for Borehole Equipment
 Buryakovskiy, L.A., Monogram for Determining the Specific Resistivity
 of Formation Water
 Vishchenko, B.Ye., On the Problem of Developing Methods for Computing
 Labor Productivity in Geophysical Operations
 AVAILABLE: Library of Congress

MM/mg
 12-31-59

Card 3/3

SAZHINA, N.B.

Errors in gravimetric measurements made from boats at sea.
Razved. i prom.geofiz. no.23:70-73 '58. (MIRA 11:12)
(Gravity)

GRUSHINSKIY, N.P.;SAZHINA, N.B.

Determining the absolute value of the force of gravity. Vest Mosk.
un. Ser. mat., mekh., astron., fiz., khim. 14 no.2:61-68 '59

(MIRA 13:3)

1. Kafedra nebesnoy mekhaniki i gravimetrii Moskovskogo gosuniver-
siteta.

(Gravity)

S/215/62/000/008/002/002
I046/I246

AUTHOR:

Sazhina, N.B.

TITLE:

The thickness of the earth's crust and its relation to the relief and gravity anomalies

PERIODICAL:

Sovetskaya geologiya, no. 8, 1962, 151-157

TEXT: Analysis of seismic wave reflection from the Mohorovicic discontinuity (240 measurements on mountains, platforms, inner seas and oceans) shows that the considerable variation in the thickness of the earth's crust in various morphological regions is not due to differences in the constitution of the strata below the Mohorovicic discontinuity. The thickness of the crust as a function of gravity anomalies is given in the first approximation by

$$H = 35(1 - \tanh 0.0037\Delta g)$$

(from measurements on over 200 stations all over the earth). A good correlation (0.85) is also obtained between the thickness of the crust and the relief of the land and the

Card 1/2

The thickness of the earth's crust...

ocean bottom. In the USSR, the thickness of the crust corresponding to the actual gravity anomalies is 30 to 34 km on the Russian platform and in the northern part of the West Siberian lowland; 24 km in the Black Sea; 70 km on the Pamirs; over 45 km on the Caucasus; 45 to 50 km in the southern depression of the Caspian Sea; 34 to 36 km in the North Kazakhstan; 34 to 40 km on the Siberian platform, over 46 km on the southern border of the platform, and over 50 km in the Altai. In Tibet, the crust thickness as estimated from the gravity anomaly is 85 km. In the Northern Arctic Ocean and off the eastern coast of the USSR the crust is about 10 km thick beyond the continental shelf. There are 6 figures. ✓

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut geofizicheskikh metodov razvedki (The All-Union Scientific Research Institute of Geophysical Methods of Prospecting)

Card 2/2

SAZHINA, N. B.

Dissertation defended for the degree of Doctor of Technical Sciences
at the Joint Scientific Council of the Geophysical Institute of the
Academy of Sciences USSR -- Earth Physics, Atmospheric Physics, and
Applied Geophysics in 1962:

"Gravitational Field of the USSR."

Vest Akad. Nauk SSSR. No. 4, Moscow, 1963, pages 119-145

SAZHINA, N.B.

Thickness of the earth's crust in relation to relief and gravity anomalies. Sov.geol. 5 no.8:151-157 Ag '62. (MIRA 15:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut geofizicheskikh metodov razvedki.

(Earth-Surface)

SAZHINA, S. N. (Co-author)

See: SHTEYNLUKHT, L. A. /

Shteynlyukht, L. A. and Sazhina, S. N. "Clinical-Laboratory investigation in penicillin therapy of skin diseases," Eksperim. i klinich. issledovaniya (Leningr. kozhno-venerol. in-t), Vol. VII, 1949, p. 291-300.

SO: U-3736, 21 May 53, (Letopis 'Zhurnal 'nykh Statey, No. 17, 1949).

L 21203-65 EWT(m)/EPF(n)-2/EWP(t)/EWP(b) Pu-4 IJP(c)/AFMD(c) JD/
 ACCESSION NR: AP5000942 WW/JG S/0136/64/000/012/0061/0064

AUTHOR: Layner, A.I., Kolenkova, M.A., Sazhina, V.A. 22
 B

TITLE: Precipitation of zirconium hydroxide from sulfate solutions

SOURCE: Tsvetnyye metally, ²⁷no. 12, 1964, 61-64

TOPIC TAGS: zirconium, zirconium hydroxide, zirconium refining, filtration rate 27 18

ABSTRACT: The effect of the pH and precipitation temperature of zirconium hydroxide on its filtration rate was investigated. A sulfate solution was heated to 62-65C, neutralized with 25% ammonium hydroxide, and adjusted to the prescribed pH. The hydroxide was then precipitated with continuous mechanical mixing of the pulp. When the proper pH value was reached, the pulp was reheated, mixed for 5-7 min, and transferred to a Buchner filter, after which a vacuum pump was started and the filtration time clocked by a stopwatch. It was found that the highest filtration rate (472 kg/m² per hour) was obtained when the hydroxide was precipitated at 95C and pH 6-6.5 with washing by one-time repulping. Washing of zirconium hydroxide on the filter lowered the filtration rate to 223 kg/m² per hour. The effect of the thickness of the precipitate layer was also investigated. It was found that a layer thickness from 10 to 20 mm had a negligible effect on filtration time. The optimal conditions for precipitating zirconium

Card 1/2

L 21203-65

ACCESSION NR: AP5000942

hydroxide were: gradual neutralization of the sulfate solution by ammonia at 60-65C to pH 6.5, followed by heating of the suspension to 95C and holding at this temperature for 5-7 min. These conditions yielded 472 kg/m² dry hydroxide per hour. Orig. art. has: 5 figures and 2 formulas.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: MM, IC

NO REF SOV: 002

OTHER: 000

Card 2/2

SAZHINA, V. G.

with P. A. Borisov, A. L. Rabkina and L. M. Noreyko "Utilization of Natural Gas in the Saratov and Stalingrad Regions"

Transactions of the Petroleum Institute, Acad. Sci. USSR, v. 11, Oil Field Industry, Moscow, Izd-vo AN SSSR, 1958. 346pp.

BORISOV, P.A.; RABKINA, A.L.; NOREYKO, L.M.; SAZHINA, V.G.

Using casing-head gas in Saratov and Stalingrad Provinces.
Trudy Inst.nefti 11:338-344 '58. (MIRA 11:12)
(Saratov Province--Gas, Natural)
(Stalingrad Province--Gas, Natural)

KUL'BA, F.Ya.; MIRONOV, V.Ye.; SAZHINA, V.I.; OGIBENINA, T.G.

Compounds formed by trivalent thallium with pyridine and
quinoline. Zhur.neorg.khim. 8 no.4:911-915 Ap '63. (MIRA 16:3)
(Thallium compounds) (Pyridine) (Quinoline)

SAZHINA, V.V.

20-1-44/58

AUTHORS: Zaytsev, N. S., Sazhina, V. V.

TITLE: Cenozoic Basalts in the Zone of the ~~Sayan-Tuva~~ **Pentonic** Break (Tuva) (Kaynozoyскиye bazal'ty v zone Sayano-Tuvinskogo glubinnogo razloma (Tuva)).

PERIODICAL: Doklady AN SSSR, 1958, Vol. 118, Nr 1, pp. 156-159 (USSR).

ABSTRACT: The eruptions of Tertiary and Quaternary basalts represent one of the most distinct evidences of the young motions in Tuva; the relief is here also designated as young by many authors (references 1-3, 10, 12). This also concerns the relief of the south of Central Siberia. The basalt eruptions are spread in the neighboring Mongoliya (references 6,7,10,12,13) and were as boulders and pieces also found in a much more western region. In 1955 the authors discovered outcrops, occurring in their place of origin of basalts in the western part of the Uyukskaya depression in the zone of the Sayano-Tuvinskiy pentonic break which were hitherto not mentioned in publications. The basalts gravitate to 2 districts of the left bank of the Uyuks-river basin. They are: a) 10 unconnected spots west of the dairy-farm Chinzhash at the right bank of the brook of the same name. The length of individual blankets attains 1,5 - 2 km, the width 200 - 300 m. b) Several smaller basalt fields are 15 km west of it, 4 km north of the settlement of Malinovka. All basalt fields represent flat summits

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and crests of narrow, table-like chains of the relief which is fairly strongly divided here. The basalt fields of group a) all lie in the same absolute altitude of 1100-1160 m, 300 m and more above the bottom of the valley of the Uyk-river. The basalts of Malinovka lie in 2 levels with a 100 difference between them, probably due to tectonic displacements after the eruption. The thickness of the basalts is 2-3 to 8-12 m. They are practically horizontally deposited and have a surface very slightly inclined toward the south. The basalts are divided in plates (group a), in those of groups b) an indistinct column- or lump-shaped disintegration tendency manifests itself; they are however, very firm and compact. Macroscopically the basalts of Uyk are quite fresh, massive, gray or dark-green rocks. Fragments of brown, porous and slag-like basalts only very seldom occur on the horizontal surfaces of denudation. Microscopically and mineralogically the basalts are very uniform. They are olivine-basalts with a very distinctly marked porphyry -or porphyry-like structure. According to the structure 2 varieties may be separated: 1) fully crystalline basalts which macroscopically correspond to the massive aphanite rocks, 2) basalts with a certain amount of glass. They correspond to the above-mentioned brown porous, slag-like varieties. Mineralogically the

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former consist of a combination of olivine, monoclinic pyroxene and plagioclase. Magnetic, hematite and apatite accessorially occur. The second group is very close to the first one and mainly differs from it by the presence of 20-40% glass. These latter basalts have a blistery structure. The cavities do not take up more than 40%; they are not filled up and are irregularly distributed in the rock, round, rarely oblong. The chemical composition and constants are given. From the analyses follows that these basalts belong to those of which an increased alkali-content and a small calcium-content is characteristic. They are very approximate to the basalts of East-Tuva and of the East-Sayany (references 7,10-14) and are simply identical with those of the basin of Khemchik and Ulug-khem. The eruptions had a fissure-character and probably are quite young, as they probably also still took place in the Cenozoic. This find of basalt connects the outcrops, occurring in their place of origin, of Biy-Khem (Northeast-Tuva) with the above-mentioned boulder fields of Ulug-khem and Khemchik. They further prove the longevity of many breaks, in this case of the Sayano-Tuvinskiy paleozoic break which was in publications already fixed in the Cambrian. In the Ordovician the Tuvinskaya proper and the West-Sayanskaya fold zones were marked off along this break. Later on the Sayano-

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-Tuvinskaya zone probably still remained mobile. Finally the
reviving differentiated motions in the Cenozoic led to the
eruptions of the above-described basalts from the fissures.
There are 1 figure, and 14 Slavic references.

ASSOCIATION: Geological Institute AN USSR (Geologicheskii institut Akademii
nauk SSSR)

PRESENTED: July 19, 1957, by N. S. Shatskiy, Academician

SUBMITTED: July 15, 1957

AVAILABLE: Library of Congress

Card 4/4

1. SAZHINOV, G. I.
2. USSR (600)
4. Rotation of Crops
7. Adopting grassland agriculture and organizing a feed supply. Korm. baza.
3, No. 10, 1952.

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

SAZHINOV, Viktor; KUPRIYANOV, Aleksey; MAKARTSEV, Ivan; VOROB'EV, Aleksandr;
DEMEKOVETS, Nikolay; MURASHKO, Petr; KULINKOVICH, Aleksandr;
TULUYEVSKIY, Ivan; RADKOVSKIY, Leonid

Our experience in the operation of the BPF-2 pneumatic combine.
Torf. prom. 40 no.4:5-12 '63. (MIRA 16:10)

1. Mokeikha-Zybinskoye torfopredpriyatiye Yaroslavskoy obl.
(for Sazhinov, Kupriyanov). 2. Torfopredpriyatiye "Bol'shevik"
Soveta narodnogo khozyaystva BSSR (for Makartsev).
3. Torfopredpriyatiye Vasilevichi II Soveta narodnogo khozyaystva
BSSR (for Vorobey, Demekovets). 4. Torfobriketnyy zavod "Ulyazh"
(for Murashko, Kulinkovich, Tuluyevskiy). 5. Torfobriketnyy zavod
"Berezinskoye" (for Radkovskiy).
(Peat machinery)

SAZHINOV, Yu.G.

Determination of the distribution function for internal excitation of molecular ions in a mass spectrometer. Trudy po khim.i khim.tekh. no.1:21-23 '64.

Equilibrium in vinyl chloride - sorbent mixtures. Part 2: Solubility of vinyl chloride in various solvents at below atmospheric pressure. Trudy po khim.i khim.tekh. no.1:24-27 '64. (MIRA 18:12)

1. Submitted July 8, 1963.

SAZHINOV, Yu.G.; KUPRIYANOV, S.Ye.

Excitation of ions formed in the ionization of molecules by
electrons. Zhur. fiz. khim. 36 no.9:1969-1972 S '62.

(MIRA 17:6)

1. Fiziko-khimicheskiy institut imeni L.Ya. Karpova.

GOLUB, A. M.; SAZHIYENKO, S. M.; ROMANENKO, L. I.

Iodide complexes of copper. Ukr. khim. zhur. 28 no.5:561-565
'62. (MIRA 15:10)

1. Kiyevskiy gosudarstvennyy universitet im. T. G. Shevchenko.

(Copper compounds) (Iodides)

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S/137/61/000/006/017/092
A006/A101

AUTHORS: Baraboshkin, A.N., Sazhnov, V.K.

TITLE: The behavior of oxide-carbon vanadium anodes during electrolysis of chloride melts

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 6, 1961, 18-19, abstract 6G161 ("Tr. In-ta elektrokhemii. Ural'skiy fil. AN SSSR", 1960, no. 1, 43-47)

TEXT: During electrolysis of oxide-carbon anodes (from pure V_2O_5 with coal-tar pitch) in a chloride melt, their dissolving is accompanied by the formation of V^{3+} and V^{4+} ions, i.e. ions which do not contain O. Such electrolytes may be employed to obtain V metal. Alloying of V with Pb (64% V) was produced by electrolysis. There are 12 references.

G. Svodtseva

[Abstracter's note: Complete translation]

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